1: Cunningham G-3 (1846-47) 1854 AJ4 W. Tibetans AJ4

goats in Ladák must be about 80,000. The average price of a shawl-wool goat is four rupees, and the total value of the flocks of Ladák Rs. 3,20,000, or £32,000.

Dog.—The domestic dog* of Ladak is the well-known shepherd's dog, or Tibetan mastiff. They have shaggy coats, generally quite black, or black and tan; but I have seen some of a light-brown colour. They are usually ill-tempered to strangers; but I have never found one that would face a stick, although they can fight well when attacked. The only peculiarity that I have noticed about them is that the tail is nearly always curled upward on to the back, where the hair is displaced by the constant rubbing of the tail.

II.—VEGETABLE PRODUCTIONS.

I.—TREES.

The vegetable productions of Ladák are few and unimportant. The trees consist of willow, two varieties of poplar,† a kind of tamarisk, the pencil-cedar, and the *Elæagnus Moorcroftii*.‡ The tamarisk and the pencil-

* The Tibetan name for a dog is *Khyi*.

† *gShol-po* and *dByar-pa*.

‡ Capt. Madden, in the Horticultural Society's Journal, has quoted a passage from Moorcroft, to the effect that "a few willows and poplars are the *only trees* in Ladák," and he then produces the authority of Capt. H. Strachey to show that Moorcroft was wrong. But the fact is, that Moorcroft is right *in what he does say*, for either Capt. Madden or Capt. Strachey has misquoted him. In his Travels, I. p. 267, Moorcroft distinctly states that willows and poplars are the *only timber-trees* in Ladák; and in I. p. 306, he repeats the same thing. But in both places he says *timber-trees;* and he is right; for the *Shukpa* (*Shug-pa*) is too small a tree to yield timber, although, if not held sacred, it might yield wood for boxes. Capt. Madden should have recollected that the *Ser-shing* had been first described by Moorcroft, and was therefore named *Elaagnus Moorcroftii*.

1: Cunningham G-3 (1846-47) 1854 AJ4 W. Tibetans AJ4

cedar (*Shukpa*) are indigenous; the others are all regularly planted. The plane-tree has been introduced into Skardo, where its size and beauty have obtained for it the name of *Shing-Gyal*, "the prince of trees." The poplar is the most valuable wood in the country, as its long straight bole is particularly adapted for bridges, and for the rafters and beams of houses. It is generally planted in straight rows. The willow abounds in all the water-courses, but generally in the state of a pollard, as its supple twigs and branches are extensively used for baskets of all kinds and hurdles. These two trees were first met with at Gya, at a height of 13,500 feet. They furnish the only fire-wood procurable in Ladák; but wood is too valuable in this barren country to be thus wasted, and the principal fuel used by the people is short Tibetan furze, called *Dáma*, and dried dung of all kinds. The Elæagnus is an ornamental tree with a yellow flower, from which it derives its name of *Ser-shing*, or yellow tree. It is the Persian *Sanjit*. The tamarisk is abundant in the narrow glen of the Rulang-chu, or Puga rivulet, below the hot springs, where they attain fifteen and sixteen feet in height, the warmth of the water, 66°, being favourable to their growth.

The fruit-trees are the apple, the apricot, the walnut, the mulberry, and the vine.* The apricot is the only one found as high as Gya, 13,500 feet. The vine and apple make their first appearance at Bazgo and Sáspul, the walnut at Sáspul, and the mulberry at the monastery of Tamisgong. The apples, which are plentiful along the Indus, are of large size and good flavour. The apricots are large, but not so well flavoured as those of Balti. The grapes are much inferior to the splendid fruit of

* The vine is called *Gun*, *rGun*.

1: Cunningham G-3 (1846-47) 1854 AJ4 W. Tibetans AJ4

245 Kashmir, but they had a peculiarity which was new to me; the same bunch would yield large grapes an inch and a half in length, and small round seedless grapes like black currants. The latter are dried in the sun, and find their way to the Zimla bazaar, where they are kept by the merchants in large earthenware jars, duly labelled as "fine Zante currants," and sold at the rate of two rupees a pound, the proper price being about one quarter of a rupee per pound. The cherry is found in the warm districts.

[435]

II.—GRAINS.

241 The crops consist of bearded and beardless barley, common wheat and buck-wheat, peas, turnips, and mustard. In the southern province of Spiti, wheat* grows at a height of 13,000 feet (at Lárá and Lidang above Dangkhar). In the valley of the Indus it first appears at Ugshé and Chimra, between 11,000 and 12,000 feet. Buck-wheat† generally affects the same elevations as common wheat. Both kinds of barley‡ are grown at an elevation of 15,000 feet; at Hanlé, at the Korzo Gonpa, on the bank of the *Tshomoriri* lake, and above Gyihbar in Spiti.

Peas§ are cultivated at Gyihbar and Loxar, the loftiest villages in Spiti, between 14,000 and 15,000 feet, and at Miru, in the Gya valley, from 12,500 and 13,500 feet. Mustard also is found at the same elevation; at Gyihbar in Spiti, and at Gya and at Miru in Ladák proper. Turnips are grown at 15,000 feet at the Korzo Gonpa, on

* Wheat is called *Gro*, which in some districts is pronounced *To*.

† *Bro*, by many pronounced *Do*.

‡ *Nas* is the name for all kinds of barley. *Nas-karmo* is white barley, and *Nak Nas* is black barley.

§ *Honma*, which is spelt *Sronma*.

adopted child behaves badly, the adoption can be set aside and another child be adopted, unless the child which misbehaved has a child, in which case the young child is retained and the misbehaving parent, or parents, is, or are, turned out of the family. If after having adopted children, a man's wife bears him a child, the adopted son and the real son are considered brothers, the adopted son being considered the elder brother. If the real son objects to this, the family property is equally divided between the adopted and the real son. 597 593 597 428

[4] ALTAR--hláto or láto the round heaps of stones erected on the crest of a pass or the top of a mountain whereon horns are placed and first fruit offerings offered up to the Hla or gods. 778 782

[5] ANGEL-- A Christian Missionary speaks of angels as konjok i phóngia or God's ambassadors. A Tibetan not acquainted with the tenets of the Christian faith would not understand what was meant by the expression. Buddhists believe in gods and goddesses and demons, but they have nothing which corresponds exactly with our idea of "angel." konjok is the great ideal divine principle having neither form or feature. The good spirits or angels or minor deities are called Hla (male), and Hlámo (fem.)--but see under heading "Spirit." 776 779

[6] APRICOT-- chooli (fresh); pháting (the dried apricots which come from Baltistan and are far superior to the Kabul dried apricots known in India as khoománi). The best apricots come from Shigar just below Skardu. Large quantities of dried apricots are exported from Baltistan to Ladák, Chángtháng and Lhássa. Ladák is too cold for apricot trees to fruit well, but there are a few good trees in Nubra and at Saspul. Apricots are not dried in Ladák. The common small apricots of Ladák have frequently a bitter taste, but the poor people value them, as an oil is extracted from the kernels, which serves either as an oil for burning, or for cooking purposes. The cost of apricot oil is almost as much as that of kerosine oil. It is called "riseegoo i marnak." 245 439 251 372 245

Apricots mature in the hot summer sun of 511
the highland plateaus up to a height of approximately 3,500 meters. [245]

Milk is supplied by the cows, the ordinary Indian cow, the yak cow, and the dsomo, a cross between the yak bull and the ordinary [234] cow. The sheep and the goats supply meat for those whose Buddhistic conscience permits it. Wool for spinning and weaving is derived from [236] the sheep, but in this case additional coarse wool must be bought from the merchant, since the yield from the shearing of their own herd is not sufficient. The goats and the yaks yield the coarse wool for the weaving of blankets, coarse carpets, sackcloth, and for the making of string.

If the Tibetan farmer is thus to a great extent self-sufficient 437 there nevertheless remains a large number of items that belongs to the necessities of life with him and which he must buy. He cannot keep up with the consumption of butter because of the great amounts he uses in the preparation of the butter tea. He buys butter from traveling merchants; this butter is sewn into goat hides and often leaves a great deal to be desired so far as its cleanliness is concerned. Salt, which is in great demand with him, he obtains in exchange for grain or dried apricots, from the nomads of the upland plateaus of Rupchu or Jangtang. These nomads break the salt from the numerous /120/ dried-up salt [135] lake beds of their homeland, and through a long, laborious journey they have their sheep and goats carry it on their backs in small sacks, in order to purchase with it in exchange trade the above-named goods and other merchandise in the neighboring provinces of Ladakh, Spiti, Lahul, and Sangskar. The highly coveted natron (used as addition to the butter tea) is likewise supplied by these upland plateaus where in many places it is found as a residue of dried-up salt water lakes. From 439 the Indian merchant the Tibetan buys Indian tea, spices, dye stuffs to dye the cloth, cotton cloth from Indian and English cottonmills (Manchester), European blue, brown, or red cloth for festive clothes, sashes, as well as all kinds of tools, combs made of hardwood, mirrors, knives, sewing materials, cheap standard clocks, soap, candies, tobacco, and many other items.

In the house of the Dragshos order and industrious work were 461 always held to be very important. From the early spring until well into the late autumn they arose together with the sun and went to work, which usually was not stopped till the sun went down, and frequently much later when darkness was setting in.

The plowing of the fields was done by the master of the house, 241 as was the custom with all farmers; the watering and weeding was done 462

3: Imperial Gazetteer G-3 (1889-95) 1909 AV1 Kashmir AV1
W. Tibetans AJ4

Srīvara the lake is called Dala. The cultivation on the lake is peculiar and interesting.

Ladākh.—The most westerly province of the high mountainous land spoken of as Tibet is called Ladākh or Ladāg. It is now politically a division of the Kashmīr State, lying between the Himālayas and the Kuenlun mountains, and between Baltistān and Chinese Tibet. The Karakoram range forms the northern boundary as far east as the Karakoram pass. The country is known to educated Tibetans by other names—Mangyāl, Nearis, Māryul.

Ladākh is one of the most elevated regions of the earth, its sparse cultivation ranging from 9,000 to 14,000 feet. The scanty population is found in scattered and secluded valleys, where along the river banks and on alluvial plateaux crops are raised by irrigation. Central Ladākh, which lies in the Indus valley, is the most important division of the country. To the north is Nubra, consisting of the valley of the Nubra river and a portion of the valley of the Shyok. The great floods of the Indus, caused by the descent of glaciers across its stream and that of the Shyok, and the consequent damming back of the Nubra river have caused great destruction to riverain lands, once cultivated but now wastes of granitic sand. Here the fields are fenced to guard the crops from the ponies of traders on their way to Yārkand. The south is the Rupshu country with its great lakes. Rupshu Lake covers an area of 60 to 70 square miles. Tsomoriri is 15 miles in length, and lies at an elevation of 14,900 feet. The lakes are land-locked and brackish. East of Central Ladākh is the lake of Pangkong, and in its neighbourhood crops of beardless barley and peas are raised at an elevation of 14,000 feet. South-west is the country of Zāskār, with a very severe climate chilled by the lofty snow ranges. Physical aspects.

The flora of Ladākh is scanty, and timber and fuel are the most pressing wants of the people. The *burtse* (*Eurotia*) is a low-growing bush which gives a fair fuel, and in the high valleys the *dama*, a kind of furze, is burnt. On some hill-sides the pencil cedar (*padam*) occurs; and in occasional ravines the wild willow is found. Arboriculture used to be discountenanced under the Gialpos, on the ground that trees deprived the land of fertility. Botany.

On the plains up to 17,000 feet wild asses or *kiang* (*Equus hemionus*), antelope (*Pantholops hodgsoni*), wild yak (*Bos grunniens*), ibex (*Capra sibirica*), and several kinds of wild sheep (*Ovis hodgsoni*, *O. vignei*, and *O. nahura*) are found; and Fauna.